FIG. 1

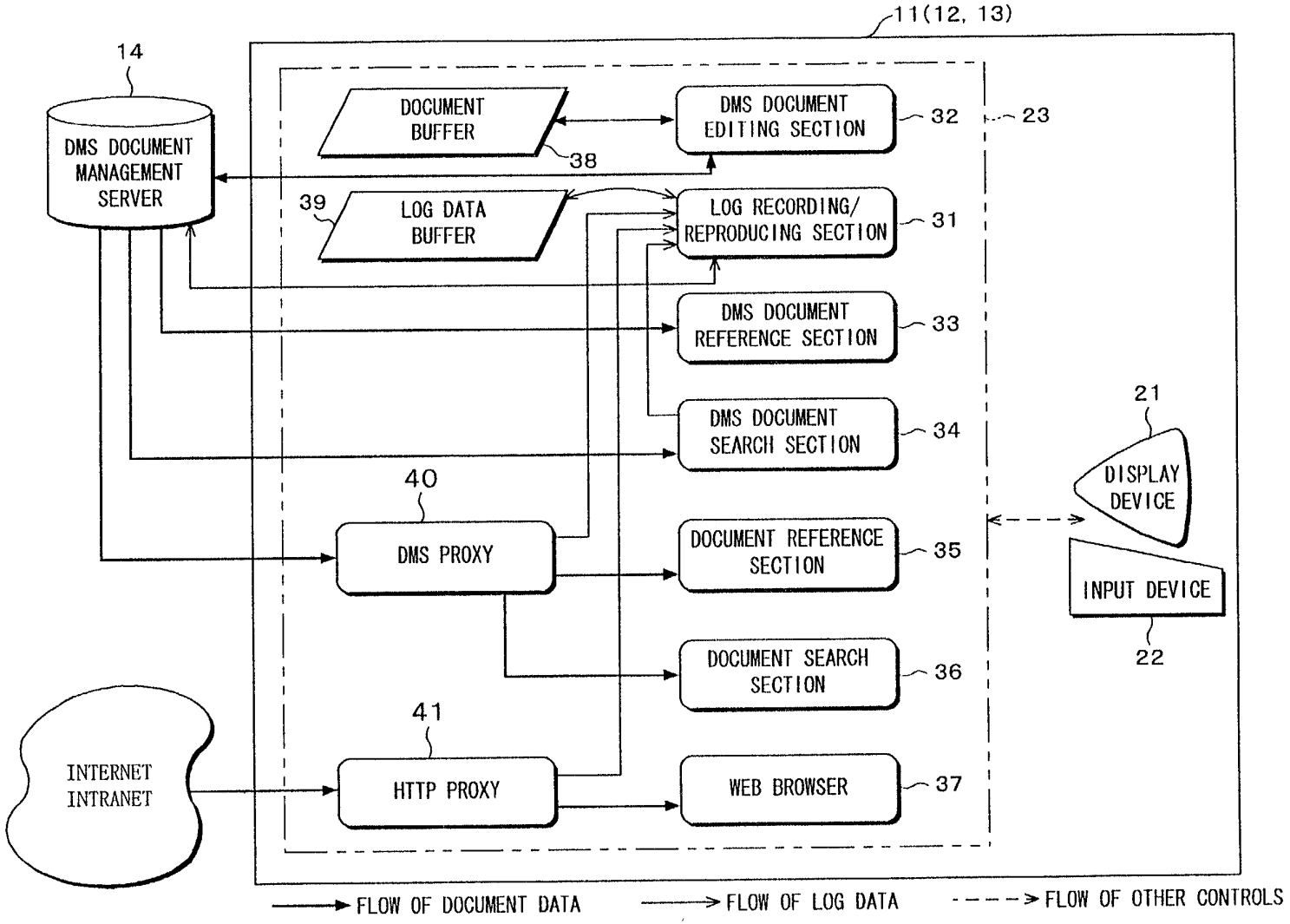

11(12, 13)
14
DMS DOCUMENT MANAGEMENT SERVER
DOCUMENT BUFFER
38
DMS DOCUMENT EDITING SECTION
32
23
39
LOG DATA BUFFER
LOG RECORDING/ REPRODUCING SECTION
31
DMS DOCUMENT REFERENCE SECTION
33
DMS DOCUMENT SEARCH SECTION
34
21
DISPLAY DEVICE
40
DMS PROXY
DOCUMENT REFERENCE SECTION
35
INPUT DEVICE
22
DOCUMENT SEARCH SECTION
36
41
INTERNET INTRANET
HTTP PROXY
WEB BROWSER
37
FLOW OF DOCUMENT DATA
FLOW OF LOG DATA
FLOW OF OTHER CONTROLS

FIG. 2

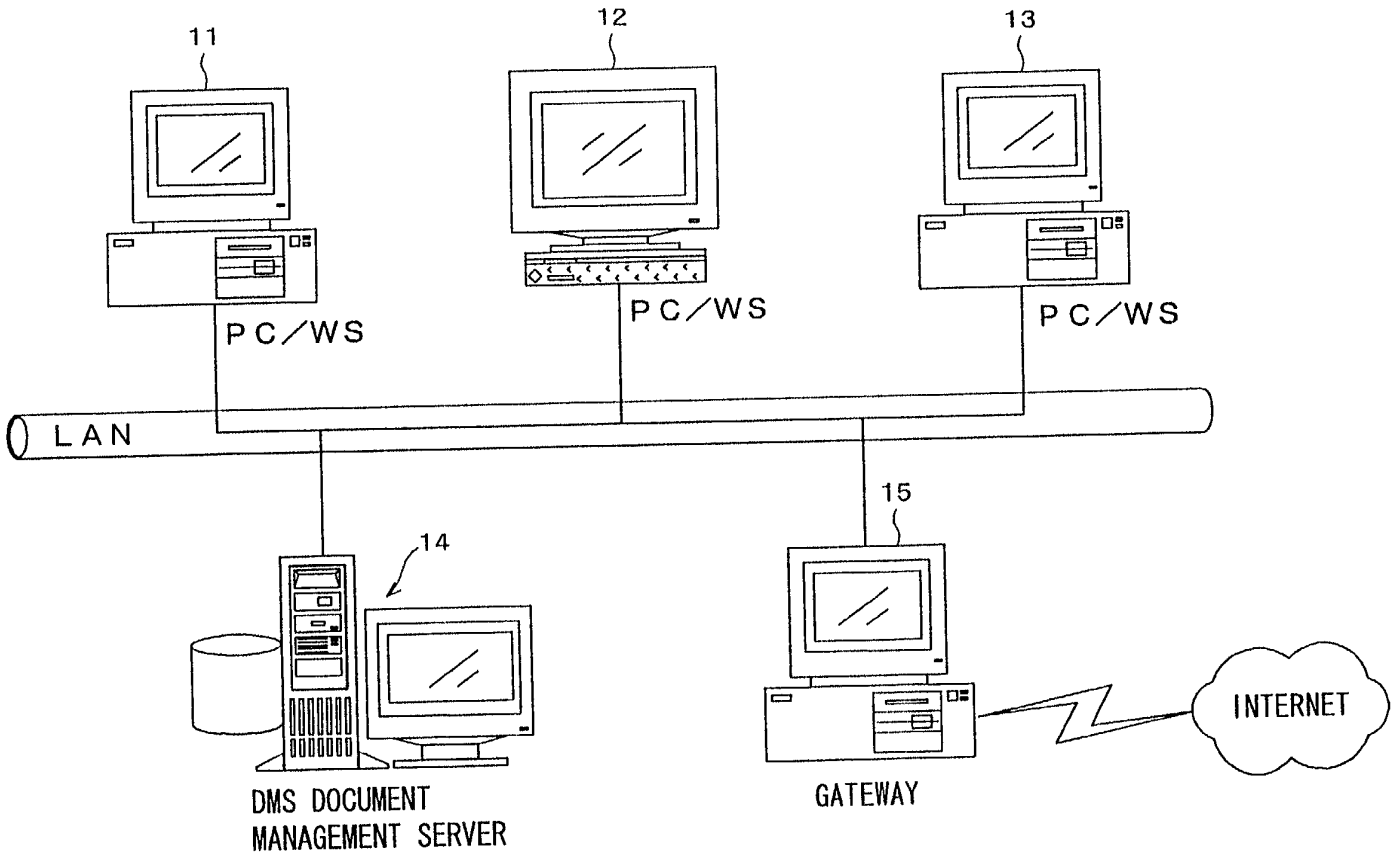

11
12
13
PC/WS
PC/WS
PC/WS
LAN
14
15
DMS DOCUMENT
MANAGEMENT SERVER
GATEWAY
INTERNET

FIG. 3

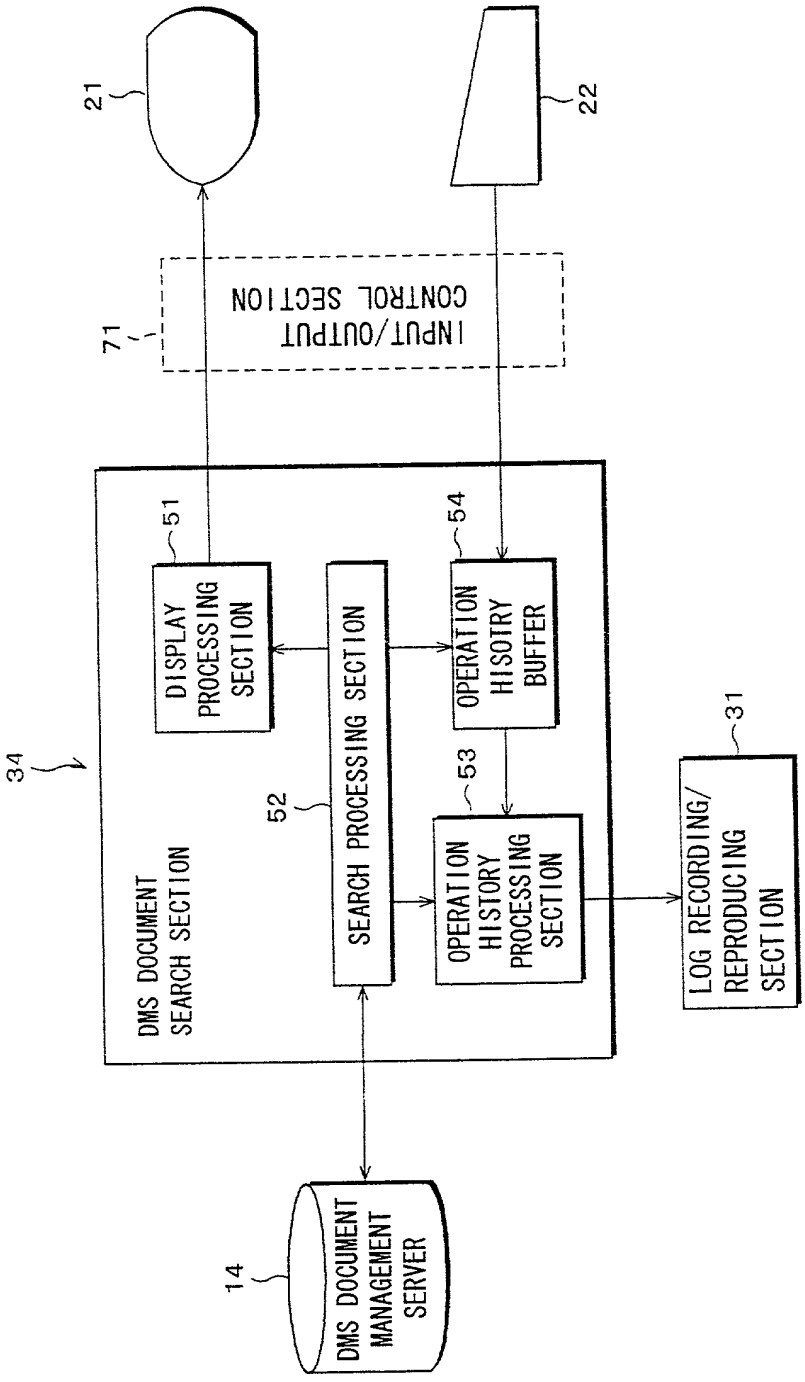

21
22
71
INPUT/OUTPUT CONTROL SECTION
34
DMS DOCUMENT SEARCH SECTION
51
DISPLAY PROCESSING SECTION
52
SEARCH PROCESSING SECTION
53
OPERATION HISTORY PROCESSING SECTION
54
OPERATION HISOTRY BUFFER
31
LOG RECORDING/ REPRODUCING SECTION
14
DMS DOCUMENT MANAGEMENT SERVER

FIG. 4

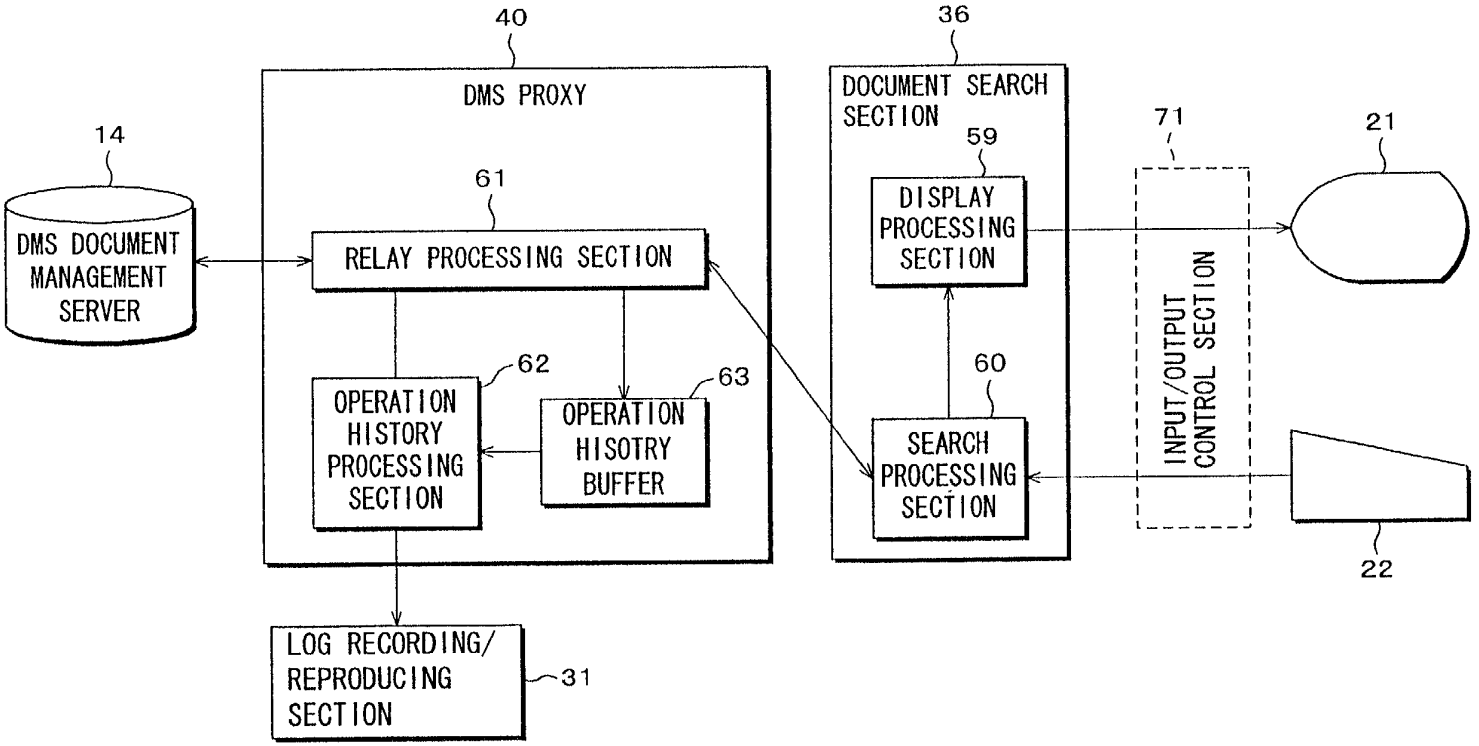

40
DMS PROXY
36
DOCUMENT SEARCH SECTION
14
DMS DOCUMENT MANAGEMENT SERVER
61
RELAY PROCESSING SECTION
59
DISPLAY PROCESSING SECTION
71
21
INPUT/OUTPUT CONTROL SECTION
62
OPERATION HISTORY PROCESSING SECTION
63
OPERATION HISOTRY BUFFER
60
SEARCH PROCESSING SECTION
22
LOG RECORDING/ REPRODUCING SECTION
31

FIG. 5

RECORDING ORDER	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....
1111	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1112	DMS DOCUMENT REFERENCE SECTION	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1113	DMS DOCUMENT REFERENCE SECTION	SERACH CHARACTER	"DCT", 6144, 6
1114	DMS DOCUMENT REFERENCE SECTION	MOVE CURSOR	6126
1115	DMS DOCUMENT REFERENCE SECTION	COPY	"DISCRETE COSINE TRANSLATION", 6142
1116	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912
1117	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"IS" 914

F I G. 6

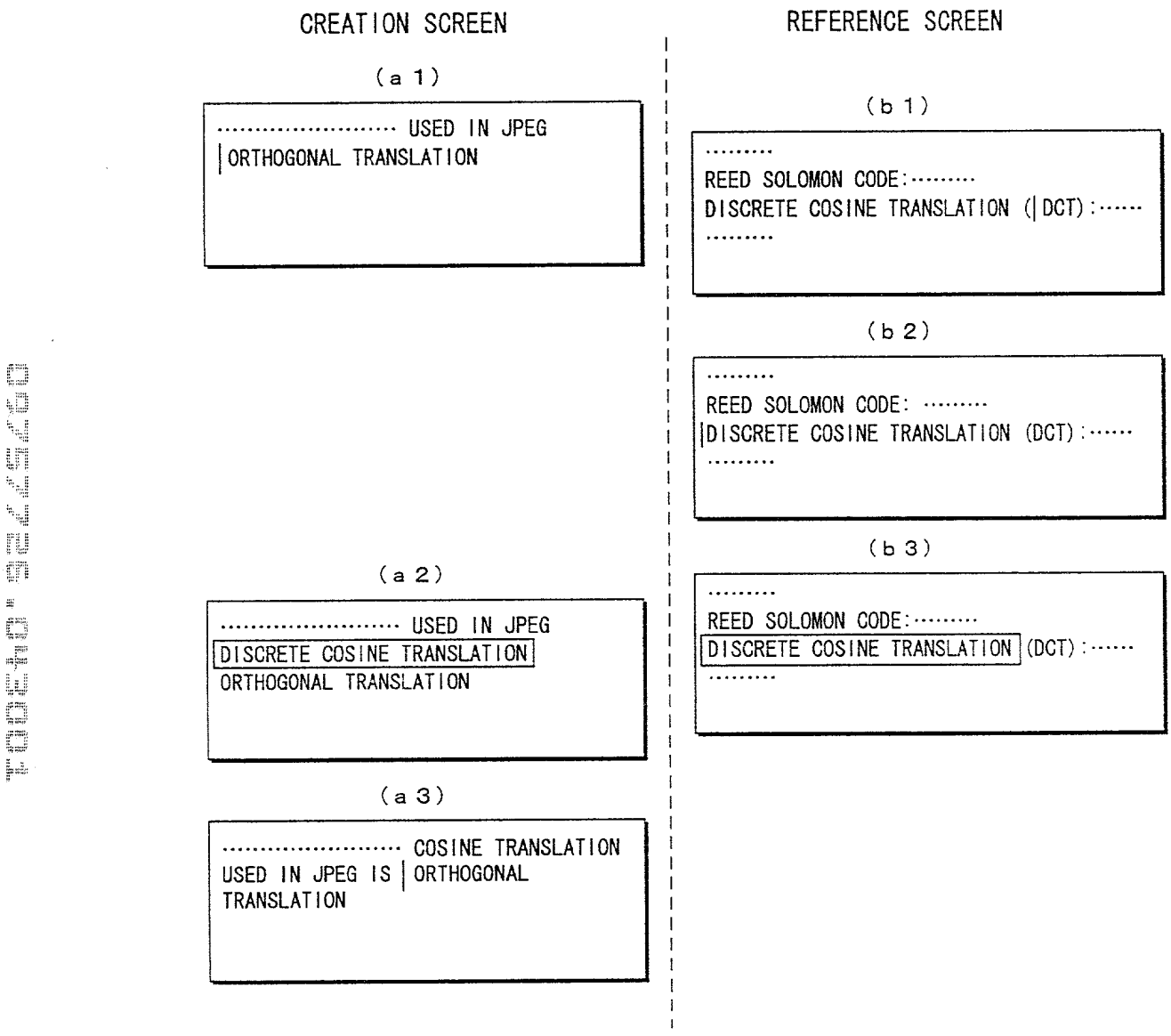

CREATION SCREEN
REFERENCE SCREEN
(a 1)
..... USED IN JPEG
ORTHOGONAL TRANSLATION
(b 1)
.....
REED SOLOMON CODE:.....
DISCRETE COSINE TRANSLATION (DCT):.....
.....
(b 2)
.....
REED SOLOMON CODE: .....
DISCRETE COSINE TRANSLATION (DCT):.....
.....
(a 2)
..... USED IN JPEG
DISCRETE COSINE TRANSLATION
ORTHOGONAL TRANSLATION
(b 3)
.....
REED SOLOMON CODE:.....
DISCRETE COSINE TRANSLATION (DCT):.....
.....
(a 3)
..... COSINE TRANSLATION
USED IN JPEG IS ORTHOGONAL
TRANSLATION

FIG. 7 (a)

○○○○○○○○○○、○○○○○○○○○○○○○○○○○○○。○○
○○○○○○○○○○○○○○○○○○○○○○○○○？

FIG. 7 (b)

0001	0～64
0002	64～124
0003	
……	

FIG. 7 (c)

0001	0
0002	64
0003	124
……	

FIG. 7 (d)

1. ○○○○○○○○○○
1. 1○○○○○○○○○○○○○○○○○○○
1) ○○○○○○○○○○
……

FIG. 7 (e)

1.	0～25
1. 1	25～74
1. 1 1)	74～…
……	……

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1111	904	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1112	896	DMS DOCUMENT REFERENCE SECTION	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1113	896	DMS DOCUMENT REFERENCE SECTION	SERACH CHARACTER	"DCT", 6144, 6
1114	896	DMS DOCUMENT REFERENCE SECTION	MOVE CURSOR	6126
1115	896	DMS DOCUMENT REFERENCE SECTION	COPY	"DISCRETE COSINE TRANSLATION", 6142
1116	896	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912
1117	912	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"IS" 914

FIG. 9

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1109	896	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"ORTHOGONAL", 900
1110	900	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"TRANSLATION", 904
1111	904	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1112	896	DMS DOCUMENT REFERENCE SECTION	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1113	896	DMS DOCUMENT REFERENCE SECTION	SERACH CHARACTER	"DCT", 6144, 6
1114	896	DMS DOCUMENT REFERENCE SECTION	MOVE CURSOR	6126
1115	896	DMS DOCUMENT REFERENCE SECTION	COPY	"DISCRETE COSINE TRANSLATION", 6142

FIG. 10

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1109	912	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"ORTHOGONAL", 900
1110	916	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"TRANSLATION", 904
1111	904	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1112	896	DMS DOCUMENT REFERENCE SECTION	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1113	896	DMS DOCUMENT REFERENCE SECTION	SERACH CHARACTER	"DCT", 6144, 6
1114	896	DMS DOCUMENT REFERENCE SECTION	MOVE CURSOR	6126
1115	896	DMS DOCUMENT REFERENCE SECTION	COPY	"DISCRETE COSINE TRANSLATION", 6142
1116	896	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912

FIG. 11

..... COSINE TRANSLATION AS ONE EXAMPLE OF ORTHOGONAL TRANSLATION USED IN JPEG IS |

FIG. 12

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1109	896	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"ORTHOGONAL", 900
1110	900	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"TRANSLATION", 904
1111	904	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1112	*896	DMS DOCUMENT REFERENCE SECTION	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1113	*896	DMS DOCUMENT REFERENCE SECTION	SERACH CHARACTER	"DCT", 6144, 6
1114	*896	DMS DOCUMENT REFERENCE SECTION	MOVE CURSOR	6126
1115	*896	DMS DOCUMENT REFERENCE SECTION	COPY	"DISCRETE COSINE TRANSLATION", 6142
1116	896	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912
.....	.....	.....	.....	.....
1122	.....	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1123	896	DMS DOCUMENT EDITING SECTION	DELETE	"DISCRETE COSINE TRANSLATION IS", (914)

FIG. 13

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1109	896	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"ORTHOGONAL", 900
1110	900	DMS DOCUMENT EDITING SECTION	MANUAL INPUT	"TRANSLATION", 904
1111	904	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1112	916	DMS DOCUMENT REFERENCE SECTION	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1113	916	DMS DOCUMENT REFERENCE SECTION	SERACH CHARACTER	"DCT", 6144, 6
1114	916	DMS DOCUMENT REFERENCE SECTION	MOVE CURSOR	6126
1115	916	DMS DOCUMENT REFERENCE SECTION	COPY	"DISCRETE COSINE TRANSLATION", 6142
1116	896	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912
.....	.....	.....	.....	.....
1122	.....	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1123	896	DMS DOCUMENT EDITING SECTION	DELETE	"DISCRETE COSINE TRANSLATION IS", (914)
1124	896	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	916
1125	916	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION IS", (934)

FIG. 14

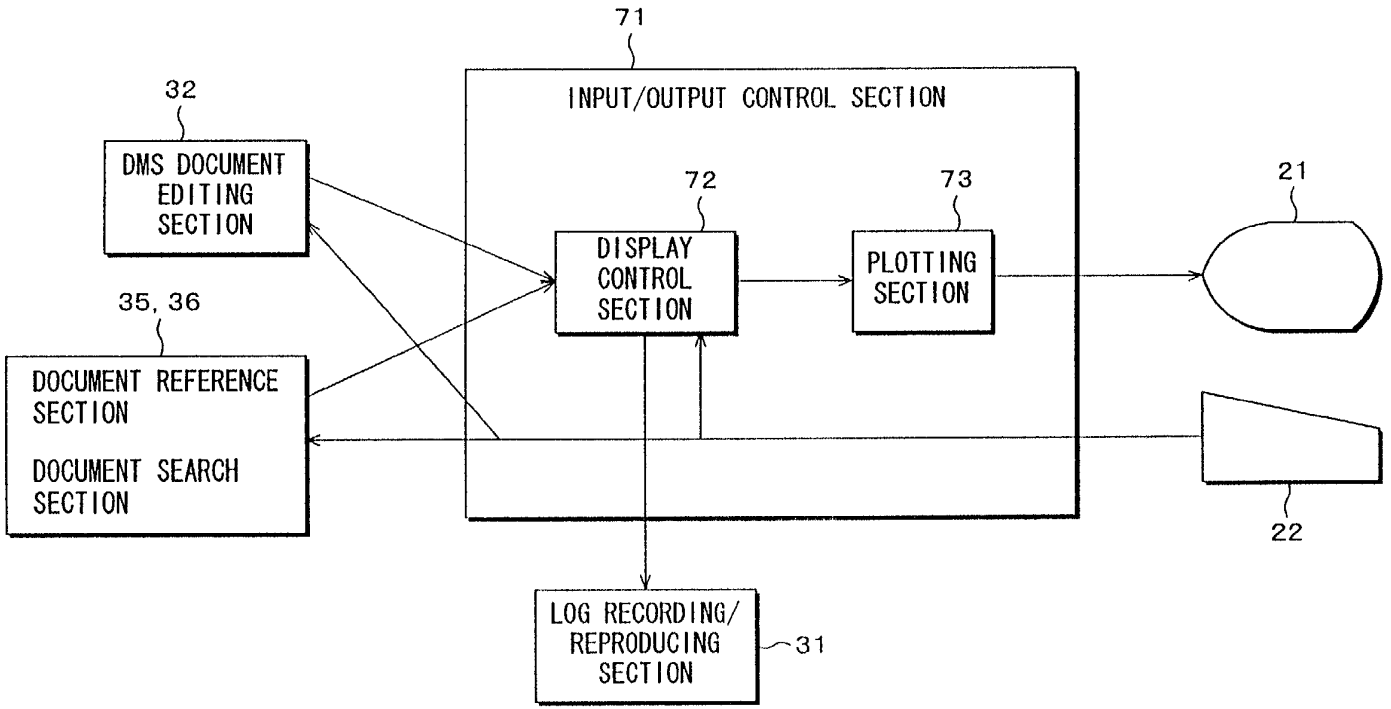
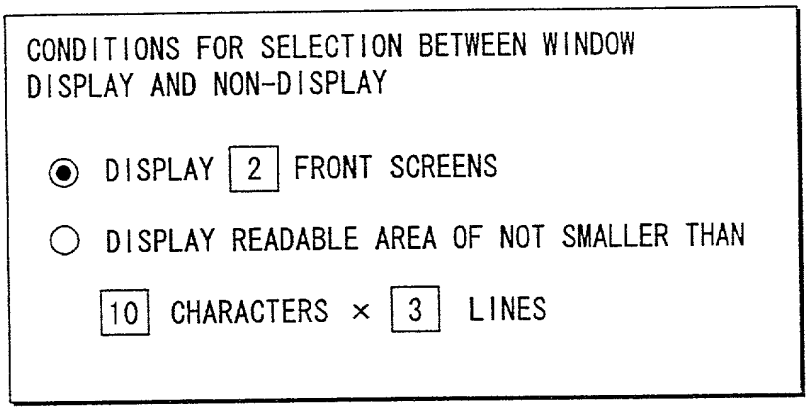

71
INPUT/OUTPUT CONTROL SECTION
32
DMS DOCUMENT EDITING SECTION
72
DISPLAY CONTROL SECTION
73
PLOTTING SECTION
21
35, 36
DOCUMENT REFERENCE SECTION
DOCUMENT SEARCH SECTION
22
LOG RECORDING/ REPRODUCING SECTION
31

FIG. 15

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1111	904	DMS DOCUMENT EDITING SECTION	MOVE CURSOR	896
1112	896	DMS DOCUMENT REFERENCE SECTION 1	NON-DISPLAY	
1113	896	DMS DOCUMENT REFERENCE SECTION 2	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1114	896	DMS DOCUMENT REFERENCE SECTION 2	SEARCH CHARACTER	"DCT", 6144, 6
1115	896	DMS DOCUMENT REFERENCE SECTION 2	MOVE CURSOR	6126
1116	896	DMS DOCUMENT REFERENCE SECTION 2	COPY	"DISCRETE COSINE TRANSLATION", 6142
1117	896	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912
.....	.....	.....	.....	.....
1236	1088	DMS DOCUMENT REFERENCE SECTION 2	NON-DISPLAY	
1237	1088	DMS DOCUMENT REFERENCE SECTION 1	RE-DISPLAY	
.....	.....	.....	.....	.....

FIG. 16



EP 0 696 769 A2

FIG. 17

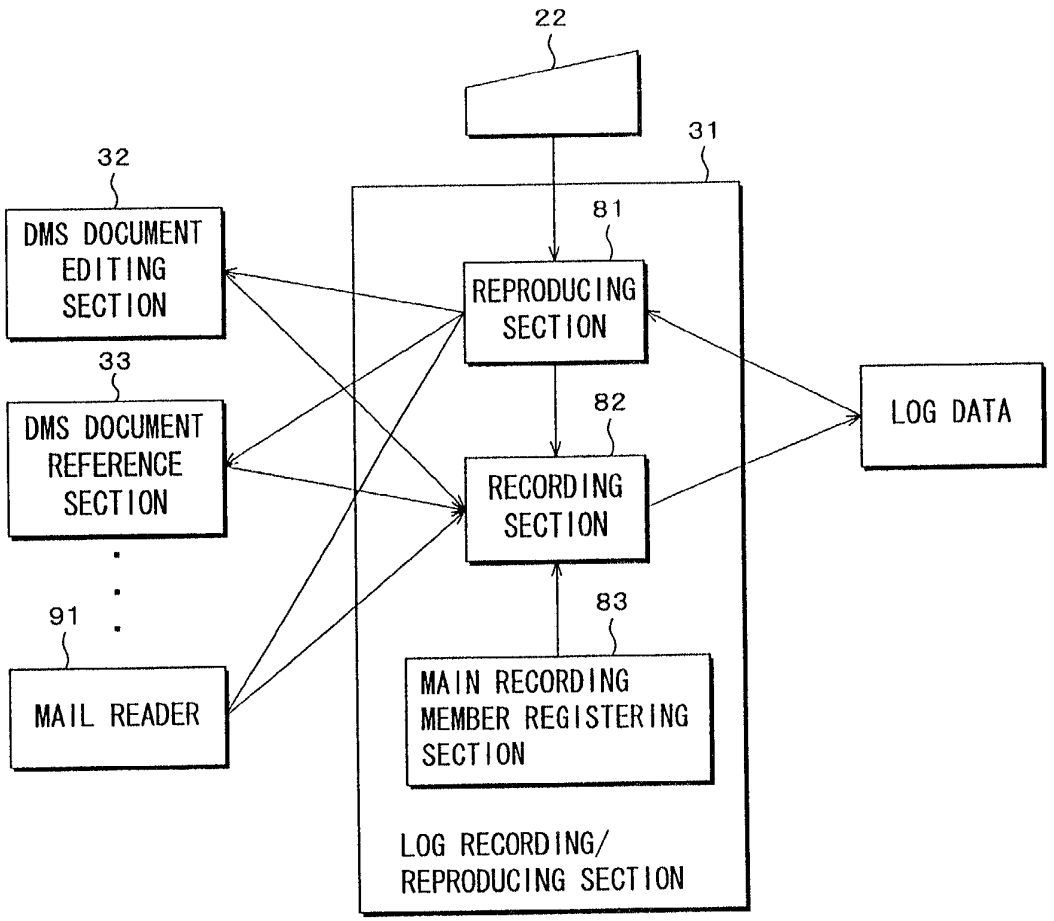

22
31
32
DMS DOCUMENT EDITING SECTION
81
REPRODUCING SECTION
33
DMS DOCUMENT REFERENCE SECTION
82
RECORDING SECTION
LOG DATA
91
MAIL READER
83
MAIN RECORDING MEMBER REGISTERING SECTION
LOG RECORDING/ REPRODUCING SECTION

FIG. 18

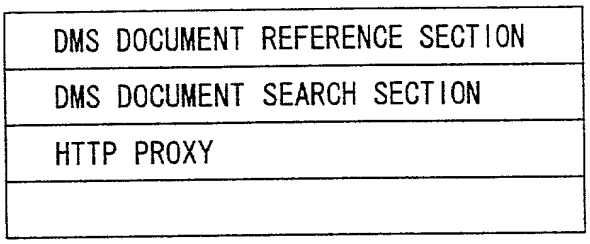

DMS DOCUMENT REFERENCE SECTION
DMS DOCUMENT SEARCH SECTION
HTTP PROXY

FIG. 19

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1112	896	DMS DOCUMENT REFERENCE SECTION 1	NON-DISPLAY	
1113	896	DMS DOCUMENT REFERENCE SECTION 2	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1114	896	DMS DOCUMENT REFERENCE SECTION 2	SEARCH CHARACTER	"DCT", 6144, 6
1115	896	DMS DOCUMENT REFERENCE SECTION 2	NON-DISPLAY	
1116	896	MAIL READER	START DISPLAY	"INVITATION FOR SOCIAL GATHERING TRIP", ···
1117	896	MAIL READER	CLOSE	
1118	896	DMS DOCUMENT REFERENCE SECTION 2	RE-DISPLAY	
1119	896	DMS DOCUMENT REFERENCE SECTION 2	MOVE CURSOR	6126
1120	896	DMS DOCUMENT REFERENCE SECTION 2	COPY	"DISCRETE COSINE TRANSLATION", 6142
1121	896	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912
.....	.....	.....	.....	.....

FIG. 20

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1112	896	DMS DOCUMENT REFERENCE SECTION 1	NON-DISPLAY	
1113	896	DMS DOCUMENT REFERENCE SECTION 2	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1114	896	DMS DOCUMENT REFERENCE SECTION 2	SEARCH CHARACTER	"DCT", 6144, 6
1115	896	DMS DOCUMENT REFERENCE SECTION 2	NON-DISPLAY	
1116	#896	MAIL READER	START DISPLAY	"INVITATION FOR SOCIAL GATHERING TRIP", ...
1117	#896	MAIL READER	CLOSE	
1118	896	DMS DOCUMENT REFERENCE SECTION 2	RE-DISPLAY	
1119	896	DMS DOCUMENT REFERENCE SECTION 2	MOVE CURSOR	6126
1120	896	DMS DOCUMENT REFERENCE SECTION 2	COPY	"DISCRETE COSINE TRANSLATION", 6142
1121	896	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912
.....	.....	.....	.....	.....

FIG. 21

RECORDING ORDER	POSITION	AP OPERATED	OPERATION CONTENT	OPERATION INFORMATION
.....	.....	.....	.....	.....
1112	896	DMS DOCUMENT REFERENCE SECTION 1	NON-DISPLAY	
1113	896	DMS DOCUMENT REFERENCE SECTION 2	START DISPLAY	"COMMON AMONG TECHNICAL SECTIONS", "TERMINOLOGIES FOR IMAGE PROCESSING", 2.0
1114	896	DMS DOCUMENT REFERENCE SECTION 2	SEARCH CHARACTER	"DCT", 6144, 6
1115	#896	DMS DOCUMENT REFERENCE SECTION 2	NON-DISPLAY	
1116	#896	MAIL READER	START DISPLAY	"INVITATION FOR SOCIAL GATHERING TRIP", ···
1117	#896	MAIL READER	CLOSE	
1118	#896	DMS DOCUMENT REFERENCE SECTION 2	RE-DISPLAY	
1119	896	DMS DOCUMENT REFERENCE SECTION 2	MOVE CURSOR	6126
1120	896	DMS DOCUMENT REFERENCE SECTION 2	COPY	"DISCRETE COSINE TRANSLATION", 6142
1121	896	DMS DOCUMENT EDITING SECTION	PASTE	"DISCRETE COSINE TRANSLATION", 912
.....	.....	.....	.....	.....

FIG. 22

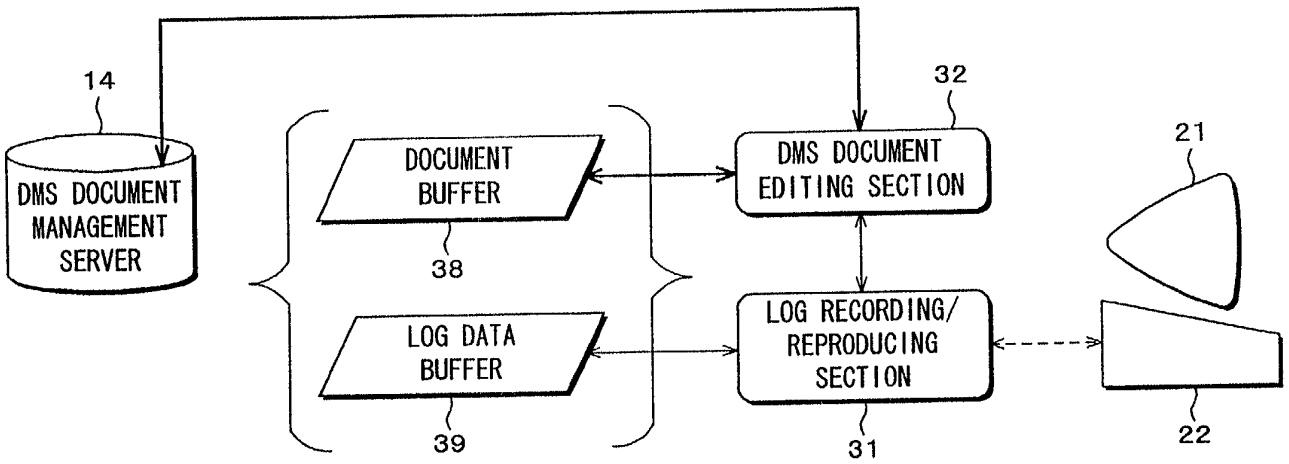
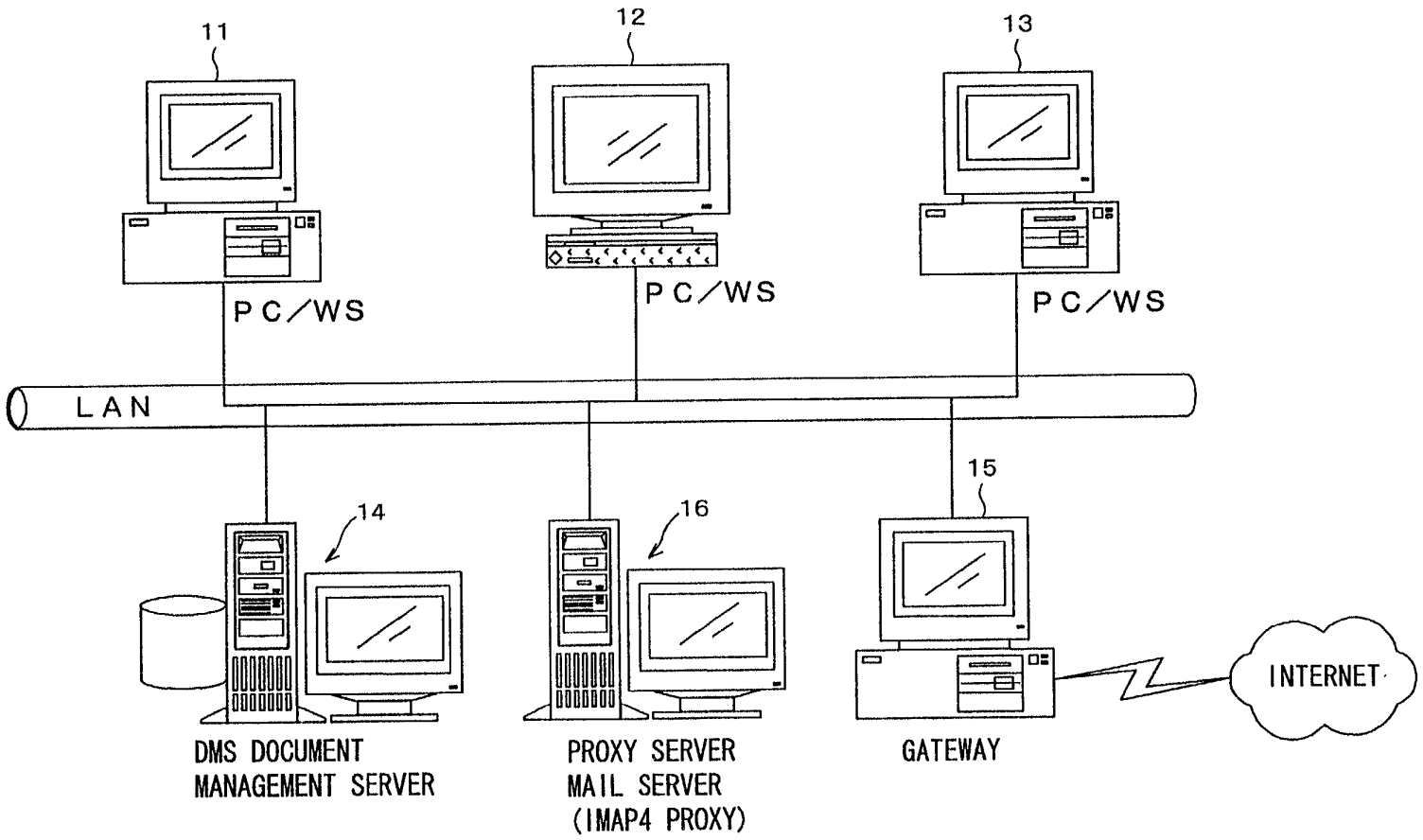

14
DMS DOCUMENT MANAGEMENT SERVER
DOCUMENT BUFFER
38
LOG DATA BUFFER
39
32
DMS DOCUMENT EDITING SECTION
LOG RECORDING/ REPRODUCING SECTION
31
21
22

FIG. 23


11
12
13
PC/WS
PC/WS
PC/WS
LAN
14
16
15
INTERNET
DMS DOCUMENT
MANAGEMENT SERVER
PROXY SERVER
MAIL SERVER
(IMAP4 PROXY)
GATEWAY